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09/873,275	06/05/2001	Kiyoko Hayashi	1907-0198P	6028

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 02/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/873,275

Applicant(s)

HAYASHI, KIYOKO

Examiner

James S. Wozniak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01/09/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**Detailed Action**

***Response to Amendment***

1. In response to the office action from 10/2/03, the applicant has submitted an amendment, filed 1/04/04, amending the specification and Claims 4 and 9, without adding new matter, and arguing to traverse the art rejection of Claim 1. The applicant's arguments are moot, however, due to new grounds for rejection based on Hyde-Thomson et al (U.S. Patent: 6,477,494), given below.
2. Based on the amendments to the drawings, specification, and claims, the examiner has withdrawn the previous objections directed towards minor informalities.

***Claim Objections***

3. **Claims 5 and 10** are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Although Claims 5 and 10 further limit Claims 4 and 9 (with respect to Claims 2 and 7), respectively, they do not further limit Claims 3 and 8, upon which Claims 4 and 9 are dependent. Claims 3 and 5 and Claims 8 and 10 contain the same limitations, and thus, Claims 5 and 10 do not further limit Claims 3 and 8, respectively. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

4. **Claims 2 and 7** are objected to because of the following informalities: “vocally reading speed” should be corrected to read --vocal reading speed--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by Hyde-Thomson et al (*U.S. Patent: 6,477,494*).

With respect to **Claim 6**, Hyde-Thomson discloses:

An electronic mail device having a communication unit for sending and receiving an e-mail and a voice synthesis control portion for controlling voice synthesis, wherein the mail device comprises:

Inserting function for inserting character setting information, which specifies a character at the time of vocally reproducing the mail text, as a text letter string in the mail text (*inserted character string identified with a particular speech synthesis setting, Col. 3, Lines 3-20*);

Reading out function for connecting with a server sharing the character setting information as shared data (*voice gateway server, Col. 2, Lines 51-56*); and

Referring to the character setting information corresponding to the text letter string inserted in the mail text (*Col. 3, Lines 3-20*); and  
Reading out the e-mail in the character voice synthesized in the voice synthesis control portion based on the referred character setting information (*selecting a text-to-speech engine for speech synthesis based upon character strings within a mail text, Col. 3, Lines 16-20*).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada (*U.S. Patent: 6,411,931*) in view of Gasper et al (*U.S. Patent: 5,278,943*), and in further view of Hyde-Thomson et al.

With respect to **Claim 1**, Yamada discloses:

An electronic mail device capable of vocally reproducing an electronic mail text,  
comprising:

A communication unit for sending and receiving an electronic mail (*electronic mail system that transmits and receives data over a communications network, Col. 3, Line 66- Col. 4, Line 4*);

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A memory for storing an electronic mail text and data including character setting information  
*(storage unit in which the received character data is stored, Col. 4, Lines 13-14);*

An input portion for inputting letters *(method of text input via a keyboard, Col. 4, Lines 43-48);*

A display portion for displaying letters and images *(display unit, Col. 4, Lines 55-59);*

A voice synthesis control portion for controlling voice synthesis *(means for vocal synthesis through an audio converter, Col. 4, Lines 33-35);* and

A speaker *(output connected to a speaker for producing an audible sound, Col. 5, Lines 1-4);*

Wherein the mail device in a mode of vocally reproducing a received electronic mail text recognizes character setting information inserted as a text letter string in the mail text, refers to the character setting information and vocally reproduces the mail text by a specified character's voice synthesized based on the character setting information by the voice synthesis control unit.

Yamada teaches neither character setting information included as a letter string within the mail text, nor text synthesis in a specified character's voice based on the character string information, however Hyde-Thomson discloses:

The mail device in a mode of vocally reproducing a received electronic mail text recognizes character setting information inserted as a text letter string in the mail text *(character string identified with a particular speech synthesis setting, Col. 3, Lines 3-20).*

While Gasper additionally recites:

Text letter string, referring to the character setting information and further vocally reproducing text by a specified character's voice synthesized based on the character setting

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information by the voice synthesis control unit (*speech data from various speakers used for speech synthesis identified by a character string (file name) or code, Col. 9, Lines 12-40*).

Yamada, Hyde-Thomson, and Gasper are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine a character string within a text used to identify a particular synthesis setting as taught by Hyde-Thomson with a code associated with a speaker file for voice synthesis capable of being utilized in a messaging system (Col. 6, Line 66-Col. 7, Line 3) as taught by Gasper, and further in combination with the speech synthesis electronic mail system taught by Yamada in order to create a code within a mail text as a character string for identifying speech synthesis settings utilized within a email system featuring speech synthesis to improve the efficiency of synthesis setting processing and automatically perform speech synthesis of a mail text. Therefore, it would have been obvious to combine Hyde-Thomson and Gasper with Yamada for the benefit of obtaining an efficient and automatic speech synthesis method and system capable of audibly reproducing a mail text, to obtain the invention as specified in Claim 1.

With respect to **Claim 2**, Yamada and Hyde-Thomson teach the speech synthesis method and device for electronic mail utilizing a character string within a text to identify speech synthesis settings, as applied to Claim 1. Yamada and Hyde-Thomson do not teach prosody data within the character setting information, however Gasper discloses:

The character setting information is defined in detail by detailed character setting information including voice quality such as voice height, deepness, reading speed, and so on

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*(Prosody rules, which can be used to synthesize intonation, emotion, and rhythm in a speaker's voice, Col. 4, Lines 41-46).*

Yamada, Hyde-Thomson, and Gasper are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the prosody rules associated with a particular speaker file as taught by Gasper with the speech synthesis method and device for electronic mail utilizing a character string within a text to identify speech synthesis settings as taught by Yamada and Hyde-Thomson to create a more animated and human-like synthesized voice in audibly recreating a mail text. Therefore, it would have been obvious to combine Hyde-Thomson and Gasper with Yamada for the benefit of obtaining realistic synthesized speech from a speech synthesis system for audibly reproducing a mail text, to obtain the invention as specified in Claim 2.

With respect to **Claim 3**, Yamada, Gasper, and Hyde-Thomson teach the speech synthesis method for audibly reproducing an email in a specified voice as applied to Claim 2. Yamada and Gasper do not teach the separation and storing of character setting information for speech synthesis, however Hyde-Thomson further discloses:

Mail device separates the detailed character setting information from the mail text, stores said information in a detailed character setting information storing portion and, in a stage of having detected a text letter string of character setting information in the mail text, reads the detailed character setting information from the storing portion and vocally reproduces the mail text based on the detailed character setting information (*identifies character strings, stores*



*information associated with identified characters, and selects the appropriate synthesis means based upon the stored information, Col. 3, Lines 3-20).*

Yamada, Hyde-Thomson, and Gasper are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the method of identifying and storing character setting information for speech synthesis as taught by Hyde-Thomson with the speech synthesis method for audibly reproducing an email in a specified voice identified by a code or filename as taught by Yamada and Gasper in order to easily compare setting information with voice files to efficiently produce a synthesized voice in audibly reproducing a mail text. Therefore, it would have been obvious to combine Hyde-Thomson and Gasper with Yamada for the benefit of obtaining a speech synthesis system capable of efficiently processing character setting information through identification and storage, to obtain the invention as specified in Claim 3.

With respect to **Claim 4**, Yamada, Gasper, and Hyde-Thomson teach the speech synthesis method for audibly reproducing an email in a specified voice as applied to Claims 2 and 3. Yamada, Gasper, and Hyde-Thomson do not specifically suggest a predetermined format of character setting information attached to the end or beginning of a mail text, however it would have been obvious to one of ordinary skill in the art, at the time of invention, to include the format of character setting information at the beginning or end of a mail text, since the method of character string identification as taught by Hyde-Thomson and applied to Claim 1, is capable of identifying a character string associated with synthesis setting information anywhere within a

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mail text, which would include the predetermined character string location in the beginning of a mail text, for efficiency in selecting a voice for synthesis.

With respect to **Claim 5**, Yamada, Gasper, and Hyde-Thomson teach the speech synthesis method for audibly reproducing an email in a specified voice as applied to Claim 2. Yamada and Gasper do not teach the separation and storing of character setting information for speech synthesis, however Hyde-Thomson further discloses:

Mail device separates the detailed character setting information from the mail text, stores said information in a detailed character setting information storing portion and, in a stage of having detected a text letter string of character setting information in the mail text, reads the detailed character setting information from the storing portion and vocally reproduces the mail text based on the detailed character setting information (*identifies character strings, stores information associated with identified characters, and selects the appropriate synthesis means based upon the stored information, Col. 3, Lines 3-20*).

Yamada, Hyde-Thomson, and Gasper are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the method of identifying and storing character setting information for speech synthesis as taught by Hyde-Thomson with the speech synthesis method for audibly reproducing an email in a specified voice identified by a code or filename as taught by Yamada and Gasper in order to easily compare setting information with voice files to efficiently produce a synthesized voice in audibly reproducing a mail text. Therefore, it would have been obvious to combine Hyde-Thomson and Gasper with Yamada for the benefit of obtaining a speech synthesis system capable of efficiently processing character

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setting information through identification and storage, to obtain the invention as specified in Claim 5.

9. **Claims 7-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyde-Thomson et al in view of Gasper et al.

With respect to **Claim 7**, Hyde-Thomson discloses the email device utilizing inserted character strings within an email in order to determine synthesis settings for speech synthesis of a mail text. Hyde-Thomson does not teach prosody data within the character setting information, however Gasper discloses:

The character setting information is defined in detail by detailed character setting information including voice quality such as voice height, deepness, reading speed, and so on (*prosody rules, which can be used to synthesize intonation, emotion, and rhythm in a speaker's voice, Col. 4, Lines 41-46*).

Hyde-Thomson and Gasper are analogous art because they are from a similar field of endeavor in speech synthesis. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the prosody rules associated with a speaker file capable of being utilized in a messaging system (Col. 6, Line 66- Col. 7, Line 3), as taught by Gasper with the email device utilizing inserted character strings within an email in order to determine synthesis settings for speech synthesis of a mail text as taught by Hyde-Thomson to create a more animated and human-like synthesized voice in audibly recreating a mail text. Therefore, it would have been obvious to combine Gasper with Hyde-Thomson for the benefit of obtaining realistic synthesized speech from a speech synthesis system for audibly reproducing a mail text, to obtain the invention as specified in Claim 7.

With respect to **Claim 8**, Hyde-Thomson further discloses:

Mail device separates the detailed character setting information from the mail text, stores said information in a detailed character setting information storing portion and, in a stage of having detected a text letter string of character setting information in the mail text, reads the detailed character setting information from the storing portion and vocally reproduces the mail text based on the detailed character setting information (*identifies character strings, stores information associated with identified characters, and selects the appropriate synthesis means based upon the stored information, Col. 3, Lines 3-20*).

With respect to **Claim 9**, Hyde-Thomson and Gasper teach the speech synthesis method for audibly reproducing an email in a specified voice as applied to Claims 7 and 8. Hyde-Thomson and Gasper do not specifically suggest a predetermined format of character setting information attached to the end or beginning of a mail text, however it would have been obvious to one of ordinary skill in the art, at the time of invention, to include the format of character setting information at the beginning or end of a mail text, since the method of character string identification as taught by Hyde-Thomson and applied to Claim 6, is capable of identifying a character string associated with synthesis setting information anywhere within a mail text, which would include the predetermined character string location in the beginning of a mail text, for efficiency in selecting a voice for synthesis..

With respect to **Claim 10**, Hyde-Thomson further discloses:

Mail device separates the detailed character setting information from the mail text, stores said information in a detailed character setting information storing portion and, in a stage of having detected a text letter string of character setting information in the mail text, reads the

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detailed character setting information from the storing portion and vocally reproduces the mail text based on the detailed character setting information (*identifies character strings, stores information associated with identified characters, and selects the appropriate synthesis means based upon the stored information, Col. 3, Lines 3-20*).

**Claim 11** recites subject matter similar to Claim 6, and thus, is rejected for the same reasons.

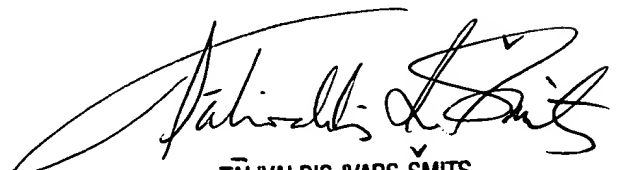
### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (703) 305-8669 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis Ivars Smits can be reached at (703) 306-3011. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak  
2/20/2004

  
TĀLIVALDIS IVARS SMITS  
PRIMARY EXAMINER